How to Implement Successful Inspections and Corrective Actions into your Project

BE AN EVERYDAY CLEAN WATER HERO

SL1227170724HNL

Objectives

- Understand inspection requirements – tips and tricks
- Know the requirements of a Corrective Action Report

Site Inspections

- Employee
- Third Party Member (consultant)
- "Qualified Person"
  - Knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

Frequency of Inspections

- At least once every 7 calendar days;
- Once every 14 calendar days and within 24 hours of a storm event 0.25” or greater
- Inspections during project’s normal working hours

Quick Tips- Pick the every 7 days option and complete it on a Wednesday to avoid most holidays

Frequency of Inspections (cont.)

- Storm Event Greater than 0.25”
  - Properly maintained rain gauge on site; or
  - Use weather station representing your location (http://www.noaa.gov)
  - Always record total rainfall measured greater than 0.25” during normal business hours
  - Conduct inspection within 24 hours once the storm accumulates 0.25” and within 24 hours after the end of the storm

Quick Tips- Purchase an electronic rain gauge that sends you info to your computer or phone

Stabilized Areas

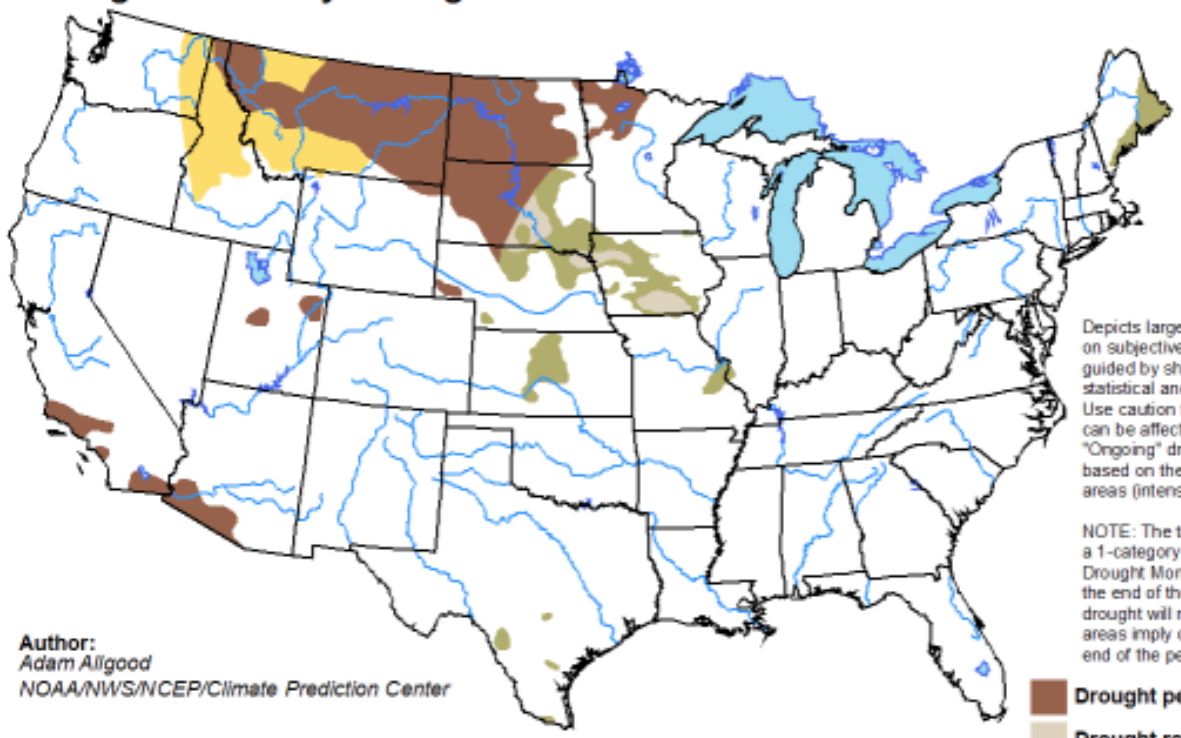
Quick Tips- Use your outlook calendar for reminders – and have your backup person on the calendar invite

- Reduce inspections to once per month
- Initial stabilization as soon as practicable, but no later than 14 calendar days
  - Vegetative stabilization
  - Non-vegetative stabilization
- Normal inspection frequency if construction activity resumes
- Document beginning & ending dates

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for August 17 - November 30, 2017
Released August 17, 2017



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Drought persists
Drought remains but improves
Drought removal likely
Drought development likely

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NOAA/NWS/NCEP/Climate Prediction Center

http://go.usa.gov/3eZ73

Areas that Need to be Inspected

- Cleared, graded, or excavated areas
- Stormwater controls
- Material, waste, borrow, equipment storage, and maintenance areas
- Receiving waters
- Point source discharges
- Concrete washouts
- Locations where stabilization measures have been implemented
- Sanitary Waste (Blue rooms) are secure

Quick Tips- Carry your site map from the SWPPP around with you to ensure you inspect all the BMPs and you can update the map in the field

Inspection Requirements

- Erosion and sediment controls appear to be operational
- Determine if any controls need to be replaced, repaired, or maintained
  - Initiate work to fix the problem immediately and complete by close of next work day
  - For significant repairs complete within 7 calendar days unless infeasible
  - If infeasible, document reasoning and complete as soon as practicable

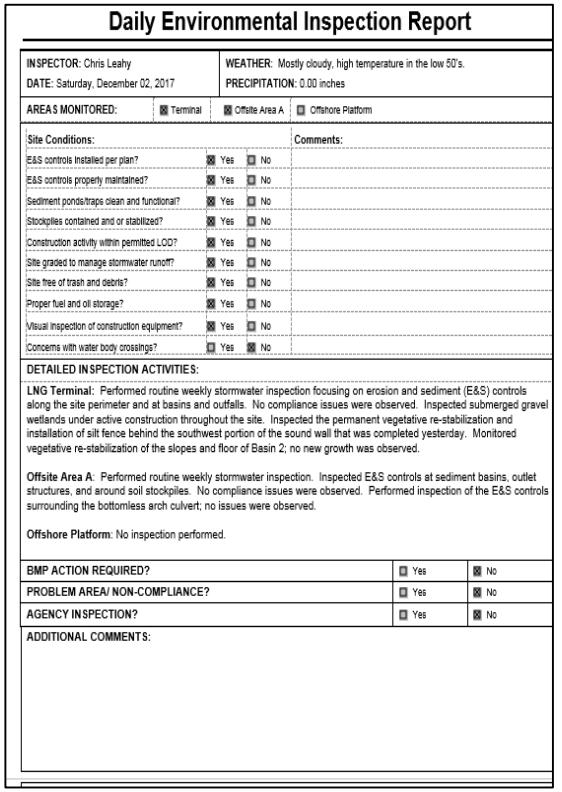
Inspection Requirements (cont.)

- Spills, leaks, other pollutant accumulations
- Identify locations needing stormwater controls
- Signs of visible erosion and sedimentation within your property or immediately adjacent to your property
- If a discharge is occurring:
  - Identify all points of discharge
  - Observe and document the visual quality
  - Are stormwater controls effective?

Inspection Report

Quick Tips- Electronic Solutions for Inspections

- Complete within 24 hours of inspection
  - Rain gauge or weather station (rain event)
  - If unsafe to inspect, document reasoning
- Maintain records for duration of 5 years past permit expiration or coverage is terminated (electronic is acceptable)



Daily Environmental Inspection Report

INSPECTOR: Chris Leahy
DATE: Saturday, December 02, 2017
WEATHER: Mostly cloudy, high temperature in the low 50's.
PRECIPITATION: 0.00 inches

AREAS MONITORED: ☒ Terminal ☒ Offsite Area A ☐ Offshore Platform

Site Conditions:			Comments:
E&S controls installed per plan?	☒ Yes	☐ No	
E&S controls properly maintained?	☒ Yes	☐ No	
Sediment ponds/traps clean and functional?	☒ Yes	☐ No	
Stockpiles contained and or stabilized?	☒ Yes	☐ No	
Construction activity within permitted LOD?	☒ Yes	☐ No	
Site graded to manage stormwater runoff?	☒ Yes	☐ No	
Site free of trash and debris?	☒ Yes	☐ No	
Proper fuel and oil storage?	☒ Yes	☐ No	
Visual inspection of construction equipment?	☒ Yes	☐ No	
Concerns with water body crossings?	☐ Yes	☒ No	

DETAILED INSPECTION ACTIVITIES:

LNG Terminal: Performed routine weekly stormwater inspection focusing on erosion and sediment (E&S) controls along the site perimeter and at basins and outfalls. No compliance issues were observed. Inspected submerged gravel wetlands under active construction throughout the site. Inspected the permanent vegetative re-stabilization and installation of silt fence behind the southwest portion of the sound wall that was completed yesterday. Monitored vegetative re-stabilization of the slopes and floor of Basin 2; no new growth was observed.

Offsite Area A: Performed routine weekly stormwater inspection. Inspected E&S controls at sediment basins, outlet structures, and around soil stockpiles. No compliance issues were observed. Performed inspection of the E&S controls surrounding the bottomless arch culvert; no issues were observed.

Offshore Platform: No inspection performed.

BMP ACTION REQUIRED?	☐ Yes	☒ No
PROBLEM AREA/ NON-COMPLIANCE?	☐ Yes	☒ No
AGENCY INSPECTION?	☐ Yes	☒ No

ADDITIONAL COMMENTS:

Successful Inspections

- Tips for inspections
- Documentation – don't save to your laptop!
- Marking in the field
- Photo taking
- Corrective actions

Corrective Actions

Corrective Actions Defined

- Repair, modify, or replace stormwater controls
- Clean up and properly dispose of spills, releases, other deposits
- Remedy a permit violation

Corrective Actions Defined

- "Immediately"

Quick Tips- you should always have corrective photos to showcase your fix

Corrective Actions

- Identification
- Tracking action items
- Assigning actions for completion
- Supporting close out of actions: materials, QA/QC
- Record action close out (documentation!!!)
- Schedule follow-ups
- Maintain!

Quick Tips- use your outlook calendar to set alerts to ensure the actions are closed out in the correct time frame

Requirements

- Install new or modified control no later than 7 calendar days from discovery:
- Modify SWPPP within 7 calendar days
- Comply with any HI DOH/EPA corrective actions

Recordkeeping Requirements

- Keep all corrective action reports at the site
- Electronically is acceptable
- Retain for minimum 5 years from permit expiration

Corrective Actions – Cheat Sheet

- Complete a Corrective Action Report within **7 days** of discovery of major problems
- Photos to show your fix
- Maintenance of erosion & sediment controls **does not** require Corrective Action Report
- If your site discharges to an impaired water and water quality standards are exceeded, contact your manager immediately